

14. Assimilation of New Satellite Data – GOES-16, JPSS-1, and COSMIC-2

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The Joint Center for Satellite Data Assimilation (JCSDA) provides a testbed for NOAA, the DOD, and NASA to accelerate the use of and increase the impact of satellite data in operational environmental analyses and models. In this presentation, preparations to characterize and test the numerical weather forecast impact of observations provided by a number of newly available satellite sensors are outlined. Among these are the radiances and derived Atmospheric Motion Vectors (AMVs) from the GOES-16 Advanced Baseline Imager (ABI), the radiances from Advanced Technology Microwave Sounder (ATMS) and the Cross-track Infrared Sounder (CrIS) to be deployed on the Joint Polar Satellite System -1 (JPSS-1), and bending angle profiles from the Constellation Observing System for Meteorology, Ionosphere, and Climate – (COSMIC-2), among others. The utilization of developments made with data from prototype platforms will be emphasized. Finally, efforts to extend the assimilation of satellite radiance data over land and under all-sky conditions will be described.